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MONTHLY REPORT

OF

THE DEPARTMENT OF AGRICULTURE,

FOR

JULY, 1868.

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MONTHLY REPORT.

WASHINGTON, D. C., *July* 29, 1868.

SIR: I herewith report, for publication, the following matter, collated mainly from the returns of July: Condition of the crops; several reports of fruit culture in the northwest; wheat-growing in the northwest; extracts from consular correspondence; export of wheat to England in 1868; the crops of Prussia; and meteorology.

Respectfully,

J. R. DODGE, *Statistician.*

Hon. HORACE CAPRON, *Commissioner.*

CONDITION OF THE CROPS IN JULY.

CORN.—The most remarkable fact in connection with the corn crop of the present year is the great increase of its acreage in the south, the difference in number of acres between the present and preceding year being more than two millions and a half. A slight decrease is apparent in the eastern seaboard States, resulting from the unpropitious character of the recent cold, wet, and backward spring, which sadly interfered with planting. A careful estimate of the acreage shows a decrease of 49,609 acres in eight States, and an increase of 3,108,215 acres in the remaining States, as follows:

DECREASE.

	Acres.		Acres.
Maine	3,300	Connecticut	9,511
New Hampshire	3,184	New York	12,888
Massachusetts	1,985	New Jersey	8,818
Rhode Island	1,719	Maryland	8,204

INCREASE.

	Acres.		Acres.
Vermont	1,679	Tennessee	127,215
Pennsylvania	57,106	West Virginia	13,131
Delaware	6,697	Kentucky	207,307
Virginia	70,775	Missouri	407,942
North Carolina	216,927	Nebraska	16,145
South Carolina	89,764	Kansas	63,411
Georgia	255,987	Iowa	236,683
Florida	48,728	Minnesota	25,500
Alabama	43,827	Wisconsin	32,361
Mississippi	313,109	Michigan	48,146
Louisiana	397,291	Ohio	178,397
Texas	132,229	Indiana	100,626
Arkansas	376,762	Illinois	366,692

These figures show an increase of over 3,000,000 of acres in corn, making about 36,000,000 in the United States, an advance of nine per cent. The percentage of Louisiana reaches 65, that of Arkansas 47, that of Kansas 30, Mis-

sissippi 25, Nebraska 25, Missouri 22, Texas 18, Minnesota 17, Iowa 15, Illinois and Ohio 8, Indiana 4.

The drought in the south has retarded somewhat the growth of corn, but its condition in that section is generally good. In the west the average is high, with the exception of Ohio and Indiana, where the weather has been somewhat unpropitious, and storms destructive. In the east, on the last of June, the growth was small, but the hot weather of July has brought a large portion of the crop into splendid condition.

WHEAT.—The condition of wheat, as shown in the July returns, is above the average for last year in all the States except Vermont, Connecticut, the Carolinas, Georgia, Florida, Alabama, Mississippi, Texas, and Nebraska. The season has been peculiarly favorable to the growth and ripening of this great bread crop in all except the southern States.

The favorable reports are so numerous, in the western States especially, that it is unnecessary to give them in detail. The general tenor of reports is that "winter wheat bids fair to be the largest crop we have had for many years;" "the yield will be immense;" "the prospect was never better for a large crop;" "the weather has been remarkably seasonable;" "the universal opinion is that the crop will be the largest ever grown in the country;" "crops all over the country were never in a more flourishing condition." Our Lafayette, Wisconsin, correspondent says he has never seen, in a residence of 40 years, a finer prospect for wheat, as well as all other crops, and that the same might be said of several adjoining counties. In Highland county, Ohio, the acreage of winter wheat is estimated at three times that of last year, and in Monroe county, Missouri, the acreage of wheat is thought to be three-fold that of 1867. In Kalamazoo county, Michigan, an unusual yield is reported, the best fields being estimated at 40 bushels per acre; and in Bourbon county, Kansas, it is claimed that many farmers will show a similar yield.

The following exceptions to this favorable showing are reported:

Queen Anne county, Md.—Our farmers are now in the midst of harvest. The crop of straw is heavy, but much fear is felt in regard to the grain. The heavy rains caused a large portion of the tallest wheat to fall about two weeks ago. It did not rise again, and experience has shown that in such cases the yield of grain is small. In addition, the present hot weather commenced last Saturday, just as wheat was beginning to ripen fairly, and the ripening was hurried up too rapidly. In this respect it greatly resembles the harvest of 1858, when the crop consisted principally of straw and chaff.

Grand Isle county, Vt.—The very cold winter and dry April killed winter wheat and clover badly.

Lebanon county, Pa.—Wheat is good in straw, but late; injured by midge at least one-third. About one-half an average crop.

Washington county, Ohio.—Winter wheat withstood the winter and looks very well, but much was killed. We shall have about two-thirds of a crop.

Henry county, Ky.—The wheat prospects have been materially injured, very recently, by the rust which has attacked it, and which, it is feared, will greatly injure its quality as well as yield. It proves to be almost universal throughout the county.

Clinton county, Ind.—The midge has injured some wheat in this county, but independent of this we have a heavy crop, at least three times as large as last year.

Lapeer county, Mich.—The growth of wheat is very great, but some is very badly lodged, and it is feared will not fill. We have had some heavy winds.

Kent county, Del.—Wheat is injured by scab, though more than the usual quantity of straw. It is now being harvested.

Dent county, Mo.—Rust is injuring the wheat crop; cannot tell yet to what extent.

Randolph county, Ill.—Ten days ago our wheat crop looked very far above an average, but within the last three days rust, &c., has injured it very much.

Stanley county, N. C.—On the first of June the prospect was very fine. All of a sudden, in less than 48 hours, the rust made its appearance on the blade, and then invaded the stem. The scab followed, the emaciated stems fell down, and by harvest not more than half a crop of light, shrivelled grain was the result. Wheat early sown and early maturing, such as the Boughton wheat, escaped the disaster, while all the late sorts proved a failure, even where early sown. The richer the land the smaller the yield.

Franklin county, N. C.—Wheat was injured by the rust, but is better than it was last year, and more was saved.

Spartanburg county, S. C.—Wheat is far inferior to last crop, but all saved in excellent condition. Last year the crop was unusually large, but much damaged by heavy and continued rains during and after harvest.

Chatooga county, Ga.—The wheat has been somewhat injured by rust. It is harvested but not threshed. The amount raised in this county last year, which was a poor crop, was about 75,000 bushels. This year, owing to increased acreage, there will be about the same amount.

Greene county, Tenn.—Wheat is cut, has very much smut, and will yield poorly from the effect of rust on blades.

Cole county, Mo.—Wheat shows rust in some places, in others the pollen was washed off by heavy rains, causing a failure to make grain. Still, compared with last year, we average 11.

Miller county, Mo.—Wheat badly rusted.

Prairie county, Ark.—Wheat was slightly attacked with rust before cutting, which was done in May and first week in June.

Dallas county, Texas.—The wheat crop is an entire failure this year, owing to three causes: 1. Grasshoppers. 2. Wet weather. 3. Rust.

In the Miami valley thousands of acres of wheat just ripening have been destroyed by floods, and other crops suffered from the same cause. Other sections of the State were visited by destructive rains at the same time, and much injury resulted to wheat, corn, and other crops. With a successful harvesting of the spring wheat it may safely be declared, in summing up the local reports, that a larger number of bushels of wheat, by many thousands, will be grown in the United States in 1868 than in any previous season.

Cotton.—Returns from the cotton districts indicate everywhere a reduction of the acreage in that crop with the exception of Texas, which shows an increase of 33 per cent. over last year, and Alabama, where there appears to be no material change in the figures. The falling off in Mississippi appears to be 18 per cent., 24 in Louisiana, 12 in Georgia, 13 in Arkansas, 18 in South Carolina, 20 in Tennessee, and 32 in North Carolina. The average reduction in acreage is about 10 per cent. With this diminished breadth there is cleaner and better culture and a more general use of fertilizers, so that the yield may be quite equal to last year, the season being equally favorable, with a like experience as to insects and other causes of injury. It is yet too early to predict the result, but the present status of the crop is fairly shown in this statement.

One county in Arkansas (Desha) reports less than a third of the acreage of last year, while the area in corn is three times as large. Such indications are hopeful. The correspondent, as might be expected, declares that the crops are all in splendid condition, and if not injured by a drought the finest yield for many years will be the result. A want of rain has been apparent in the Gulf States and a severe drought has afflicted western Tennessee, but few complaints of its effects upon cotton are made. So far the plant enjoys a very general exemption from casualties and injuries.

Arkansas county, Ark.—The cotton crop bids fair to be the best since 1860. The dry, hot weather is proving fine for the cotton; it is growing very fast, jointing short and very full of squares, (or bloom.) The first bloom this year was found on the 15th, but the average was about the 20th June, which is about six days later than the average; this makes the crop about 21 days earlier than last year. I have not seen a crop that will not make 500 pounds lint per acre if no mishap comes to it. About one-third as much planted as in 1865, but will make more than in 1865.

Pike county, Miss.—The acreage in cotton is smaller this year, but the season has been propitious. The early portion of the season was dry, thus enabling the planters to work their land and keep the crop clean of grass, so that the land became well pulverized. For the last three or four weeks the weather has been seasonable. The crop is the earliest we have had for years; blooms were seen as early as the 15th of June. At present everything looks very promising for the planter.

Rye, oats, and barley promise abundant crops; no serious drawbacks are reported, and few complaints of bad condition are received.

Potatoes, so exceptionably unproductive last year, are in unusually fine condition, and the average is increased in every State except Rhode Island—the natural result of extremely high prices of last year's crop.

Fruit is variable; apples and peaches less promising than usual. Vermont, New Jersey, Delaware, Maryland, Virginia, Arkansas, Missouri, Iowa, Illinois, Indiana, Kentucky, and West Virginia, make a worse record than other States as to apples. Peaches will be less abundant than apples; New Jersey, Maryland, and Delaware promising but half a crop, and Illinois and Michigan showing a considerable reduction. A fair promise of grapes is indicated.

Tobacco covers as large an area as usual in Virginia, Kentucky, and Connecticut; somewhat less in Indiana, Illinois, and Missouri. Its condition is good in Kentucky and Michigan; elsewhere a little below an average.

Sorghum is generally doing well in the west; not so well as usual in the middle belt of southern States.

Wool.—There is a decrease in the wool product, compared with the clip of 1867, of something like 7 per cent., or about 8,000,000 pounds. The decrease is 10 per cent. in Ohio, 6 in Michigan, about 5 in Illinois, 8 in Iowa, and 13 in New York and Vermont. Wisconsin, Missouri, Kansas, and Arkansas, show an increase, and New Jersey a slight increase, from the attention now bestowed upon mutton breeds.

Table showing the condition of the crops on the first day of July, 1868.

STATES.	CORN.		WHEAT.		RYE.		BARLEY.		OATS.	PASTURE.
	Total acreage compared with last year.	Average condition July 1, compared with last year.	Average condition of winter wheat July 1, compared with last year.	Average condition of spring wheat July 1, compared with last year.	Average condition of winter rye July 1, compared with last year.	Average condition of spring rye July 1, compared with last year.	Average condition of winter barley July 1, compared with last year.	Average condition of spring barley July 1, compared with last year.	Average condition July 1, compared with last year.	Average condition July 1, compared with last year.
Maine	9.3	9.6	10.6	9.8	10.1	10	9.4	9.3	9.5	10.5
New Hampshire	9.2	9.5	10.1	9.9	10.1	9.7	.....	10.1	10.2	11.2
Vermont	10.4	10.5	8.7	11.3	9.8	10.5	12.5	10.6	11.2	11.1
Massachusetts	9.7	9.2	10	10.6	10.8	9.8	9.6	10	9.5	11
Rhode Island	8.7	8.5	.....	.....	10	9.3	.....	8	8	11
Connecticut	8.6	8.3	9.6	9	9.6	9	10	9.3	9.6	13
New York	9.8	9.6	10.9	10.9	10.5	10.5	10.4	10.9	11.4	11.4
New Jersey	9.7	8.7	10.3	.....	9.8	.....	.....	.....	9	10.5
Pennsylvania	10.6	9.5	10.9	11	10.4	9.9	10	10.2	10.5	10.6
Delaware	10.3	9.3	10.6	10	10	.....	.....	.....	9.3	10
Maryland	9.8	9	11.7	.....	10.3	.....	.....	10	10	10.7
Virginia	10.8	9.5	10.7	.....	10.5	10.5	.....	.....	10.8	10.8
North Carolina	11.4	11.4	9.1	.....	10	10.3	9.6	.....	10.3	9.9
South Carolina	11.1	9.7	8.1	.....	9.2	8.7	10	9.6	7.1	9
Georgia	11.2	9.2	7.7	.....	10.1	9.9	9.7	10	9.5	9.2
Florida	12.3	10.1	7	.....	8	10	.....	.....	8	10
Alabama	10.2	7.9	7.8	.....	9.2	9.6	9.5	9.2	9.4	6.9
Mississippi	12.5	11.1	11.6	.....	10.2	10.2	10	10	12	9.6
Louisiana	16.5	10.8	.....	.....	17.5	.....	.....	.....	9.2	9.7
Texas	11.8	9.1	6.2	.....	8.6	7.7	8.5	7.5	8.9	10.3
Arkansas	14.7	11.3	11.6	.....	10.2	10	10.3	9.6	11.2	9.6
Tennessee	10.6	8.9	10.3	.....	10.2	9.9	9.1	10.6	9.9	8
West Virginia	10.6	9.9	15.3	11	10.5	10.8	11.3	11	11.2	10.2
Kentucky	11.1	10.3	10.8	10.4	10.1	11	9.8	10	11.4	10.2
Missouri	12.2	10.9	12.6	13.4	11.4	9.8	10.8	10.6	11.2	10.5
Illinois	10.8	10.6	11.6	11.3	11.3	10.1	10	10.8	10.8	10.4
Indiana	10.4	9.7	13.2	12.1	11.3	11	10.6	10.4	11.2	11.2
Ohio	10.8	9.7	13.1	11.2	10.9	11	9.6	10.6	11.1	11.1
Michigan	11	10.4	12.3	11.1	11	10.4	10.6	11	11.6	11.4
Wisconsin	11.1	11	10.4	11.4	10.2	10.5	10.1	11	10.8	9.7
Minnesota	11.7	12.3	12.4	13	10.6	11	11.6	11.5	11.7	11.2
Iowa	11.5	11.5	11.1	10.2	10.1	10	10	9.8	10.2	10
Kansas	13	11.9	11.5	11.7	11.2	10.7	10.9	10.6	11.1	10.5
Nebraska	12.5	11.7	9.2	11.1	10.5	11.2	9	11	10.7	10.5

Condition of the crops, &c—Continued.

STATES.	CLOVER	TIMOTHY.	POTATOES.		BEANS.		SORGHUM.		APPLES.	PEACH'S
	Average condition July 1, compared with last year.	Average condition July 1, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	Average condition, compared with last year.	Average condition, compared with last year.
Maine	9.9	10.3	10.2	9.3	11.5	10	.....	.....	11.8	.....
New Hampshire	11.4	11	11	9.8	10.9	9.7	.....	.....	12.8	10
Vermont	10.8	10.2	11	10.7	11.3	10.6	.....	.....	9.8	.....
Massachusetts	10.6	10.8	10.5	9.8	9.8	9.5	8	10.5	13	9.5
Rhode Island	10.2	10.2	9.5	9.2	10	8	.....	.....	14.7	10
Connecticut	11	11.3	10.6	8.6	9.6	9.3	8.5	8.5	11.6	9.3
New York	11.1	11.2	11	10.3	10.6	10.6	8.7	9.5	10.7	11
New Jersey	10.8	10.7	10.2	9.9	10	10	9	9.3	8.1	5.5
Pennsylvania	10.9	10.6	11.7	10.3	10.1	10.6	8.7	9.4	11.6	9
Delaware	10	10.6	10.6	9.3	11	10	9	9	6.3	2.2
Maryland	10.6	11	15.1	9.6	10	9.8	7.7	8.7	7.1	5
Virginia	11	10.8	10.5	10.4	10.1	10	7.7	8.6	7.1	4.5
North Carolina	10.3	9.8	10.7	10.3	10.2	10.2	7.9	9	8.8	10.1
South Carolina	9.6	.....	10.5	9.7	9.6	8.8	8	9.2	10.1	12.2
Georgia	10.7	10.1	10.5	9.2	10.2	8.9	8.9	8.8	12.4	12.6
Florida	.....	.....	13.6	10.4	7.6	10	4	10	.....	6
Alabama	10.1	9	10	8.2	9 8	8.2	10	7.2	13	13.5
Mississippi	10	10.6	13.2	11.6	10	10.8	10.3	9.7	12.5	18
Louisiana	10	.....	14	10.8	11	11	15	10	11	13.2
Texas	10	10	10.8	9.8	10	10	9.2	9.1	11.1	14
Arkansas	10.1	9.6	12.4	10.2	12.6	9.7	12.1	9.7	9.6	12.4
Tennessee	8.7	8.2	10.3	8.3	10.5	8.3	9.7	8.9	12	10.1
West Virginia	10.5	9.8	12.7	10.6	10.1	10	9.8	10.5	7.8	7.5
Kentucky	9.6	10.1	11.1	11.1	10.1	10.3	9.7	9.6	7	6.8
Missouri	10.4	9.6	12.7	10.9	11.2	10.6	10.1	10.4	7.4	11.5
Illinois	10.2	10.1	11.1	11.3	10.5	10	9.3	10.1	6.7	9.5
Indiana	11.2	11	11.9	11	10.2	10.1	9.5	9.7	6.3	13.4
Ohio	10.5	10.6	12.3	11.3	10.5	10.2	9.5	10	11.2	8.8
Michigan	11.1	10.8	12.6	10.6	11.3	10.3	8.9	10.1	10	9
Wisconsin	10.3	9.2	10.9	10.3	11.5	10.1	8	10.3	8.3	10.4
Minnesota	10.5	10.6	11.5	11	11.5	10.7	9.3	10.8	10.5	5.5
Iowa	9.7	9.4	11.6	10.5	10.7	9.2	9.9	10.8	9.8	11
Kansas	11.4	10.6	15.4	11.3	11.7	10.2	10.3	10.7	11.2	12.5
Nebraska	11	10.4	15.1	12.7	11.5	11.4	11.2	10.9	10.4	11.5

Condition of the crops, &c.—Continued.

STATES.	GRAPES	STRAWBERR'S.	TOBACCO.		COTTON.		SUGAR CANE. (not sorghum.)		WOOL.
	Average condition July 1, compared with last year.	Amount of crop, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	Total acreage, compared with last year.	Average condition July 1, compared with last year.	How much less wool will be sheared this spring than last?
Maine	8.8	9.7	.....	.....	.....	.....	.....	.....	13.1 per cent.
New Hampshire	10	10.4	.....	.....	.....	.....	.....	.....	12.8 per cent.
Vermont	9.2	10.8	.....	.....	.....	.....	.....	.....	13 per cent.
Massachusetts	7,5	10.9	12	9.6	.....	.....	.....	.....	8 per cent.
Rhode Island	8.5	10	.....	.....	.....	.....	.....	.....	3.3 per cent.
Connecticut	8.3	11.6	11.3	9.6	.....	.....	.....	.....	15 per cent.
New York	10.4	11.5	10.9	10.4	.....	.....	.....	.....	13 per cent.
New Jersey	9.5	10	.....	.....	.....	.....	.....	.....	½ per cent.*
Pennsylvania	9.5	11.3	10.2	10.2	.....	.....	.....	.....	9 per cent.
Delaware	9.6	8.6	.....	.....	.....	.....	.....	.....	10 per cent.
Maryland	10.5	15	8.3	9	.....	.....	.....	.....	18 per cent.
Virginia	9.4	9	10.3	9.5	6.5	9.5	.....	.....	15 per cent.
North Carolina	10.6	10.1	9.3	9.3	6.8	10.4	.....	.....	8 per cent.
South Carolina	9.6	9.2	10	8.7	8.2	9.4	.....	.....	16.7 per cent.
Georgia	10.2	10.1	9	8.9	8.8	9.4	10.6	9.3	14 per cent.
Florida	10.5	9	11	9	8	10.2	11.1	10	20 per cent.
Alabama	10.1	8.9	9.1	8.4	10	9.7	.....	9	11.8 per cent.
Mississippi	10.9	10.7	11.1	10.9	8.2	12.7	12.5	10	18 per cent.
Louisiana	15	13	12	10.5	7.6	13.3	10	11.5	
Texas	20	10.5	8.7	9.8	13.4	10.2	10	10	6.4 per cent.
Arkansas	11.5	11.2	12	9.5	8.7	12.1	.....	.....	9 per cent.*
Tennessee	9.7	8.5	10.4	8.3	8	9.3	.....	.....	9.3 per cent.
West Virginia	10.7	10.1	11	9.9	.....	.....	.....	.....	6 per cent.
Kentucky	11.3	8.3	10.2	10	8.8	9.8	.....	.....	1.3 per cent.
Missouri	11	9.5	9.4	9.6	8.7	10	.....	.....	4 per cent.*
Illinois	10.6	7.3	10.1	9.9	8.1	9.6	.....	.....	4.8 per cent.
Indiana	11.7	8.9	9.2	9.7	.....	.....	.....	.....	3 per cent.
Ohio	9.2	9.5	9.8	9.7	.....	.....	.....	.....	10.1 per cent.
Michigan	10.2	11.8	9.6	10	.....	.....	.....	.....	6.3 per cent.
Wisconsin	10.3	10.1	8.4	9.6	.....	.....	.....	.....	7½ per cent.*
Minnesota	11	11.8	10	10.5	.....	.....	.....	.....	2.1 per cent.
Iowa	9.8	9.3	9	9.3	.....	.....	.....	.....	0.8 per cent.
Kansas	11.6	11.2	9.8	10.1	9.5	10.5	.....	.....	3 per cent.*
Nebraska	12.7	11.7	10.4	10.8	.....	.....	.....	.....	17 per cent.

* More.

EXTRACTS FROM CORRESPONDENCE.

UTAH AGRICULTURE.

Salt Lake City, Utah.—The spring, up to the middle of May, was very propitious for our seeds, and fine rains, interspersed with fine weather, gave everything such a start that the grasshoppers or locusts could not make much headway in their destructive warfare; but since that date a dry spell has set in, and these insects have flourished and grown prodigiously. Our citizens in various parts of the Territory set to work, digging ditches, driving the "hoppers" in, and then burying them; also driving them into creeks, having traps or baskets, gunny-sacks, or netting placed to catch them, and then burying them. By these methods many millions have been destroyed. On one small stream there were caught, to my knowledge, twenty bushels a day, about the size of house-flies. But nevertheless, they still crowded the gardens, the fields, and thoroughfares, and have done considerable damage in various places. I presume the breadth of land put in cultivation this spring is at least double that of any previous year, and as there are no grasshoppers in the north part of the Territory, (though very thick in the south,) we have hopes of raising sufficient to victual us. The grasshoppers have used me and my garden pretty badly. Have saved nothing but peas and squashes, and my trees have suffered considerably from them. They commenced to fly ten days ago, taking a southeasterly course.

Utah county, Utah.—The prospect of our fruit crop is fair, although we have had myriads of grasshoppers. They have destroyed much of the crops, many of our farmers warring with them, and burying them in the ground, &c.; Mr. A. H. Scott, with the help of his family, having bagged and buried about 80 bushels, and he now expects to make quite a crop of wheat. We take pleasure in acknowledging the regular receipt of monthly reports, which are perused by members of the club with profit and satisfaction. At our meeting last evening Mr. Charles Twelves brought in a sample of green peas, from seed forwarded by you this spring; the name is Advance, a sweet, excellent growing pea. On June 1 last, the same gentleman brought forward a sample of the Philadelphia Early, ready for use; they do well here. * * * H. A. Cheever, of this place, has grown the Excelenta strawberry, of large size and good flavor, 25 berries weighing one pound.

COTTON.

Craven county, N. C.—There has been quite a falling off in the amount of cotton planted this year, compared with 1867, in this county, owing to the fact that farmers failed to grow sufficient breadstuffs last season for their support. Attention has been turned almost entirely to the culture of corn, field peas, potatoes, wheat and rye; consequently only about one-third of the land planted in cotton last year has been devoted to that crop in this section the present season. The inability to feed their animals, from the want of grain, the absolute necessity of making something to eat, the very low price at which cotton sold during most of the last season, and the fear that Congress at a late period of the present session would re-enact a tax upon the cotton crop, together with the impossibility of farmers procuring funds to enable them to purchase supplies, and the scarcity of horses and mules, have operated greatly to deter the farmers of the State from attempting to cultivate cotton on a large scale.

AFFAIRS IN TEXAS.

Nueces county, Texas.—The enhanced value of wool, and the great demand for beef cattle for export, have had a tendency to turn all planters to stock-

raising, and to leave off planting either cotton or corn—both uncertain crops, at least in this county. The high prices paid by our merchants during the past season have given a fresh impetus to wool-growing. Nearly the entire clip of this spring has already been purchased, and at paying prices. Our flocks are gradually being improved, and have done well since October last. The clip is about 25 per cent. more than last year. At no time have the wool-growers had their pockets so well lined with money as this season.

The liberal prices paid by our merchants is drawing an immense amount of wool and hides from the interior of Mexico, through this port, which, together with our home production from all the counties west of us, makes the county more prosperous than at any time within my recollection. A great amount of beef has been packed at this point by the infiltration process, with fine success. Next winter a great deal more will be packed by the same process. The sheep stock suffered from drought in the earlier part of the month, but the general rains commencing on the 20th have set all things right, and all are again doing well. Up to the present time lambs have done splendidly, and if we have no loss this summer, the wool clip of 1869 will be 50 per cent. more than that of 1867. Wool, with careful management, can be grown in this county at 15 cents per pound, specie, and if it continues to improve in price, and flocks do well, our county will be in a most flourishing condition. We have not yet tried any mutton sheep, but it is our intention this fall to import a few of Scott's Kentucky, or Cotswolds, to see how they will do in our hot, dry climate.

FRUITS IN FLORIDA.

Putnam county, Fla.—Before the war the lands of this county were not much cultivated. The hummock lands were not suited to the growth of cotton, and the agricultural interests were confined mainly to stock-raising. Since the war, however, a new system of agriculture has been introduced, and the attention of our people is now directed to the culture of fruits and vegetables, particularly upon the lands bordering on the St. John's river. The other lands remain in about the same condition as before the war. The culture of vegetables for the early northern markets is a new experiment, initiated by northern men, and has so far been attended with very flattering success.

With proper facilities for transportation, the cities of the north might be supplied with early vegetables raised here by open field culture, and which are now obtained only at great expense through the agency of forcing pits and hot-houses.

But the attention of our people is mainly directed to the culture of fruits, especially those of the orange family, embracing the orange proper, the lemon, lime, and citron; all of which thrive well in this latitude. As yet there are but few groves that have begun to bear, but the young groves of one and two years' growth promise well, and the number of trees that have been set out during the past two years, between this place and Jacksonville, will not fall far short of 250,000.

INSECTS.

La Pointe county, Wis.—The potato bugs have made their appearance and commenced their ravages on the vines; we do all that can be done to destroy them.

Polk county, Wis.—The potato crop looks well, but would have been entirely destroyed if growers had not daily picked the bugs, so that but few eggs were hatched. In some gardens, where this was neglected, the tops are entirely eaten up.

Carver county, Minn.—Our crops promise well except potatoes, which, on account of the potato bug, I fear will be a partial failure.

Green Lake county, Wis.—The potato bugs are numerous and threaten to destroy the entire crop, but the season is so far advanced that a portion may be spared.

Cass county, Mich.—The ten-lined potato bug (beetle) is rapidly extending. First seen here last year.

Mahoning county, Ohio.—The cut worm has been very bad on many pieces of corn, otherwise corn would be good.

Stark county, Ohio.—Corn is backward and injured by worms.

Linn county, Kansas.—The chintz bugs have injured late wheat somewhat, spring wheat in particular.

Rutherford county, Tenn.—Insects are preying upon some crops. The red ants, the louse, (*aphis,*) and grasshoppers are injuring the late planting, and the boll worm has appeared in several localities.

DISEASES OF HORSES AND CATTLE.

Holmes county, Miss.—That dreadful pest of stock and cattle (sharbone) has again made its appearance in its most terrible form. Mules being so valuable, and the impoverished condition of the people, prevents experiments, but I am satisfied that the cauterization of the affected part with nitric acid, and the internal administration of muriated tincture of iron, would prove beneficial. One party has used nitric acid internally, 30 drops in a quart of water with a little sugar, used as a drench, and the success seems certain. I did not have nitric acid, but administered last night to two mules 50 drops of the nitro-muriatic acid, with decided benefit: they are living this morning, and I shall repeat the dose. The poison oak root was tried, as recommended in the April number of the Agricultural Report, but with no success whatever. I know of five mules cured one after another by the administration of nitric acid—30 drops—with the external use of pine tar. Some attribute this disease to the sting of a fly. It attacks cows, horses, mules, &c. In my neighborhood 108 mules have died within the last 18 days.

Clay county, Ky.—From the 1st of May to the 14th of June there has been prevalent here a disease that has killed 50 to 60 head of cattle. It seems to be a kind of fever. Some die in three days, and from that up to 20 days. When opened they are found mortified inside. I have found calomel a certain cure, giving to three-year olds 40 grains; under three years, 20 to 35 grains.

HOG CHOLERA.

Madison county, Miss.—I have closely observed the various symptoms and stages of a disease among swine, known as cholera, and have tried nearly all the published remedies, both as preventives and cures, with but little success. About seven years since I determined to adopt remedies used by my father near forty years ago for a similar disease. I have not lost a hog from cholera when I used the remedy as a preventive, and in every instance when, from neglect, the disease made its appearance among my hogs, I have succeeded in curing it in a few days. Procure two or more large barrels and have them placed convenient to the kitchen; deposit all the pot-liquor, dish-water, and greasy water of any kind, refuse pieces of bacon, and a few buckets full of soap-suds. Let it stand a few days or until fermentation begins; then add to each barrel one bushel of pine charcoal, (I have never used any other kind,) a half bushel of corn-meal, one handful of salt, and one-half pound of copperas. Let it stand a short time so that the coal may become thoroughly saturated with the liquid, then pour into troughs made for the purpose. One barrel thus prepared, given

once or twice a week, will be sufficient for fifty hogs, and prevent cholera and keep them in a healthy condition.

Sullivan county, Tenn.—The hog cholera made its appearance about the 1st instant, but in a mild form; is there no preventive or remedy? Other farm stock exempt from disease. [There is no remedy whatever.—Ed. Rep.]

Hickman county, Tenn.—Hog cholera is again making its appearance. In some neighborhoods one-half of the killing hogs for the coming season have died. It is difficult to find a preventive.

CULTIVATION OF FRUIT IN NORTHERN IOWA.

George W. Wheaton, esq., of Wilson's Grove, Fayette county, Iowa, supplies the following interesting details of his experience in fruit-growing on the prairies of northern Iowa:

For the last ten years I have been endeavoring to raise an orchard on the prairie in northern Iowa. After many disappointments, by not knowing how to do it, and the varieties that would flourish here, I have at length succeeded tolerably well. Raising an orchard here is a very different matter from what it is in northern Indiana or other good fruit regions; yet, by selecting the proper varieties, and the right kind of cultivation and protection, success is certain. Many persons are deterred from emigrating to this country under the impression that fruit cannot be grown here, but let the news go forth that, with judicious selections, and proper care, as good apples can be grown in northern Iowa as in any part of the northwest. The proper varieties are hard to find, however, as most nurserymen will recommend such as they have to sell. I am not a nurseryman and have no trees to sell, but I have tested quite a number of varieties of grafted fruit and a good many seedlings, and my experience may be of benefit to others who contemplate starting orchards in this region. Every person, before paying his money for trees, should resolve to take care of them or he had better keep his money. Thousands of dollars are lost in this country every year by buying unsuitable trees, and more by not taking care of them after they are planted.

The varieties which have succeeded best with me are, Duchess of Oldenburg, Tallman's Sweet, Fameuse, English Golden Russet, Perry Russet, Roxbury, Antrim, Strawberry, and Red Astrachan. The Duchess of Oldenburg, is the hardiest of all, and I never have had any of the trees injured in the least by our hardest winters. The Jonathan also succeeds tolerably well with me, and I have one tree, about ten years old, which last year bore a bushel of most excellent apples. I consider the Oldenburg, Fameuse, and Tallman's Sweet the most valuable for this place, and they are all abundant and early bearers. Many suppose seedlings to be more hardy than grafted fruit, but I do not find such to be the case. Out of 500 seedlings I have not more than 8 or 10 as hardy as the kinds enumerated; besides, there is an uncertainty in getting productive trees or good fruit from seedlings.

The next thing in order is the preparation of the soil. If it is designed to set trees on prairie with a clay subsoil, which most of our prairies have, it should be ploughed at least a foot deep in order to make a better and firmer soil for the trees; the surface soil alone being too loose and peaty, and gives too soft and sappy a growth to the trees. I think it best to set the trees about three inches deeper than they grew in the nursery, and they should be well cultivated until about the middle of July, when cultivation should cease in order to let the trees ripen up for winter.

About the time the ground freezes there should be an inch or two of barnyard manure spread about the roots in order to prevent dry freezing, which destroys great numbers of young trees and shrubs on the prairies. I have lost quite a number of young trees from this cause. It is also best to set the trees leaning somewhat to the southwest, as they generally do better when set in this manner than when perpendicular. Before winter sets in each tree should have the trunk wound with a rope made of prairie hay, which is an effectual preventive against injury by rabbits, and also prevents the bursting of the bark of the tree. This bursting of the bark seriously injures the tree, and various expedients are resorted to to prevent it; some nail a piece of siding on the south side of the tree, others tie a few cornstalks around the tree; either will do some good, but a hay rope is best; it should be removed in the spring.

It is a good plan to raise corn in the orchard every year, and to leave the stalks standing until the next spring, as they help to keep the snow on the ground and prevent deep freezing. If a part of the orchard is set with currant bushes or black-cap raspberries they will answer the same purpose, and will be found profitable. At the time the orchard is set a screen should be planted on the north and west sides. A row of Scotch pine set six feet apart, or a row of Norway spruce set four feet apart, will make a beautiful and effective screen by the time the

trees come into bearing if given good cultivation, and young trees can be bought by the thousand very cheap. A good and cheaper screen can be made by planting two or three rows of the acorns of the common black or scrub oak, which retains its leaves all winter, and with good cultivation will grow rapidly. Fruit trees in this region should always be planted out in the spring, as they are much more likely to live than when set out in the fall. An important consideration is to set good trees. The best I have, and the best I have seen, came from Wisconsin. From some cause eastern trees do not succeed so well here; they are grown too closely in the nursery and have long, naked stems; no fruit tree for the prairie should have a naked trunk of more than two feet.

I have experimented somewhat with pears, as I have a great desire to grow them, but my efforts have not been sucessful, and, without having a single pear, my trees are now all dead. I have also tested several varieties of plums, but find none that will pay for cultivation. They are all too tender here except our native wild plum, of which we have an abundance, of good quality, in our groves, and which can be readily transplanted to the orchard, where they will produce abundantly.

Cherry trees of the Morello class grow very well, and are hardy, but they have not yet been very productive of fruit with me.

The Concord grape grows well, and produces abundantly and generally ripens its fruit. It has never been attacked with mildew or rot, but the vines need protection in the winter. The Catawba ripens its fruit about one-third of the time when they do not rot.

FRUIT CULTURE IN WESTERN MICHIGAN.

Henry S. Chubb, corresponding secretary Lake Shore and Western Michigan Horticultural Association, writes as follows of the Grand Haven fruit region:

The prospect for peaches among the orchards of this vicinity is excellent. Every living peach tree has on its limbs a superabundance of rapidly advancing fruit. The prospect for apples is not as large. Strawberries are very abundant and are selling at from 10 cents to 15 cents per quart. The late exhibition of strawberries and other small fruit, at Spring Lake, showed that this sandy region is well adapted to the production of these first fruits of the season. Gooseberries, currants, and raspberries also promise well. The cherry trees are laden with fruit, and, notwithstanding the curculio, there will be a fair crop of plums. Grapes, also, are looking well.

An orchard of 20 acres, peaches and apples, planted about 10 years ago in this city, is for the first time bearing a full crop. It is estimated that there will be about 3,000 bushels of peaches this season, besides the apples, pears and grapes, which occupy more than half the enclosure. The other old orchards of this vicinity, some of which have borne well before, are also heavily laden with peaches.

The upward tendency of prices in fruit lands is a sure indication of the increasing interest attached to fruit-growing in this vicinity. Large tracts of land around the city, purchased less than a year ago for from $5 to $11 per acre, have been selling rapidly in ten acre lots at from $25 to $100 per acre, for fruit lands; while close to the city, one-quarter acre lots in almost inaccessible positions on hillsides, &c., held for years at $25 a lot, are now selling at $75 to $100. Some of the ten-acre lots, sold for fruit lands at $100 an acre late last fall, are now realizing $800 per acre in quarter-acre lots. Fruit land in eligible locations can still be had for $25 per acre in the wild state, but this price is very likely to double before the close of this season. Improved fruit lands vary from $500 to $800 per acre when in bearing. These prices, however, do not include the present crop, which promises so well that it will almost purchase the land at these prices.

FRUIT CULTURE IN WISCONSIN.

L. L. Fairchild, of Dodge county, Wisconsin, writes as follows in reference to the progress of fruit culture in his section of the State:

There are a goodly number of orchards in this county, producing from 200 to 500 bushels, and occasionally higher, up to 1,500 bushels. We are in latitude 43½° north, and the severity of our winters (the mercury occasionally running as low as 35 degrees below zero) makes it absolutely necessary that only the very hardiest varieties of fruit trees be planted. Many having failed with favorite trees brought from the east, thought it useless to try to grow fruit, but the persevering ones who kept on trying have found a few varieties that bid fair to stand the test of our severest winters. The Duchess of Oldenburg, Red Astrachan, Golden and Perry Russets, Winesap, Tallman's Sweet, Fameuse, and some others seem reliable. The quality of our apples I think superior to fruit produced in southern Illinois.

We have plenty of wild plums; some of them are quite good, and on account of the toughness of their skin not so liable to be stung by the curculio as the tame varieties. The hardier varieties of the tame plums grow finely, but the curculio stings all the fruit.

Wild black and choke cherries are plenty, but the fine cultivated kinds are mostly failures. The common Morello grows well and bears sparsely. The Early Richmond grows well, but so far as my observation extends does not bear very profusely.

The Isabella grape with proper care, will ripen about one year in three. One man tells me that by severe cutting back he succeeds in ripening them nearly every season. The Hartford Prolific, Concord, Diana, Northern Muscadine, Delaware and some others do well. They should be laid down and covered in the fall with an inch or two of earth, to guard against injury to the fruit buds. I left a vine each of Hartford Prolific and Clinton on the trellis the past winter, and both are now throwing out fruit spurs, though the mercury at one time sunk 32 degrees below zero.

Doolittle Black Cap, Purple Cane, Yellow Cap, and Cincinnati Red raspberries are all hardy and produce good crops. Brinckle's Orange will not succeed without protection.

Wilson's, Russell's Prolific, Agriculturist, and some other varieties of strawberries do well. It is better to cover in the winter, as the frost throws out the roots. The Triomphe de Gand is worthless here, being unproductive. Currants, gooseberries and tomatoes are abundant.

WHEAT-GROWING IN THE NORTHWEST.

A casual correspondent in Iowa, referring to the correspondence between Congressman Donelly and the Commissioner of Agriculture, in the monthly report for June, questions the conclusion of the congressman that the diminished yield of wheat in his State "is to be attributed to a degeneracy in the vitality of the seed more than exhaustion of fertility of the soil." The following extracts from his letter are made:

One thing is very certain, that nothing will impoverish the richest soil and the most industrious people more certainly than devoting all their energies to the production of a single crop, and sending that crop away to distant markets for sale and consumption. So far from encouraging this tendency in any people, it ought to be earnestly discouraged. If the people of Minnesota can find no other profitable crop to plant in their soil, "for eighteen years in succession," no spirit of prophecy is required to foretell what their fate will be in a very short space of time, comparatively. The only hope is in the intelligent, well-directed efforts of the people of Minnesota themselves. Rotation with other crops must be their first object. No soil that is at all worn can have justice done it by planting the same crop two years in succession. It must be rested with some other crop—with grass, or with fallow. Unquestionably, good seed is a requisite, but only one of many quite as imperatively necessary. We have skinned and skinned our lands, western and southern fashion, with the same result. Now, living in an old settled county, with railways and other conveniences bringing us close to the large markets, and with prices of grain that will compensate for taking intelligent pains to do differently, we must either do differently, or give up this branch of agriculture to newer virgin soils farther west, or elsewhere. We are all busily at work now at the former, and so far find our efforts well paid. Nothing is more certain than that it is far better to till but 20, or even 10 acres of land, and do it right, than to skin over 100 year after year in the old style.

He thus illustrates the value of a proper seed distribution:

About four years ago the superscription was lost on a package of one pound of Tappahannock wheat that was passing through our post office. After knocking about the office for some time, the postmaster gave it to a wide-awake farmer of this county. At first he paid but little attention to it, and sowed it broadcast, in the usual way, on a piece of land he had prepared for it. The product of that pound was 20 pounds of most beautiful grain. Though he had never raised wheat to any extent, he liked its looks so well that he bought a drill expressly to plant it the next year. The details of his cultivation are not at hand, but this year, from that small beginning, he will have upwards of 1,000 bushels of as choice wheat as ever was seen, from 40 acres of land. He has just shown a sample, which is better, if possible, than the original. When it is threshed we will give its weight per bushel, and send a sample to the department, if desired. I have advised him to advertise and scatter this seed widely, and not sell any of it to the mills, and that he had better not sow the same seed on the same land for a succession of years. He is very confident, however, that by his division of fields and rotating to different parts of his farm, he can maintain the quality, if not gain in it, for an indefinite number of years. The seed is now perfectly pure, though in 40 acres he found 16 heads of rye, which he carefully cut out. If this had not been done, it would have injured his seed very much for future use. Too great

pains cannot be taken to keep specimens of this wheat perfectly pure and free from weed-seeds or other grain of any kind whatever.

For my own part, if the price of a very superior wheat keeps up, as it has for many years, I am confident that it will pay to cultivate wheat somewhat as we do corn. If not, why not? The yield is not quite in so tangible a shape or so large a pile, but it is correspondingly of more value. Let as many farmers as can be persuaded to do so, make the effort this season, on even a fraction of an acre; sow in drills, in some dry spot, where it will not winter-kill. In spring work it as soon as possible with the cultivator, and continue to work at proper intervals as long as possible, to keep down weeds, to aerate the soil, to invigorate the plants, &c., precisely as we do corn. Why should not the result be the same? Why should we not do this? Only because we have not been accustomed to do it, and because we "haven't time." These reasons are altogether unsatisfactory. We all know that a single grain, sown by itself, will tiller out, if it has room, over a space of four or five feet in diameter, with 20 to 50 or more stalks, containing from 300 to 1,500 grains. This yield is never even approximated in field culture. The more we reflect on these facts the more we must be convinced that the yield which it is not only possible but easy for us to obtain from our soils has not yet even been approached.

CONSULAR CORRESPONDENCE.

From Russia.

The following extracts from a letter written by Eugene Schuyler, esq., United States consul at Moscow, to the Commissioner of Agriculture, give interesting data concerning Russian flax, fruits, and wine. Further experiments in the introduction of apples from that country, for the northwest, should be undertaken The *Duchess of Oldenburg* has already proved one of the most hardy and reliable apples of the extreme northwest, and it is probable that other varieties from northern Russia may be found equally valuable:

The chief agricultural products of my district are flax, hemp, the cereals, and apples. Good varieties of wine are made in Russia, but only in the Caucasus and the Crimea, which are in the district of the consulate of Odessa.

The best flax districts are not far from Moscow.

With regard to hemp, a Mr. Puzyanof has invented a mode of bleaching it so as to be perfectly white, and of softening the fibre, without injuring its durability. If you wish, I will endeavor to procure for you the particulars of this invention.

The apples of the Crimea are fully equal to the best apples of America; those of central Russia, while not so good, are very fair. I received some time ago a letter from Mr. Smith, the editor of the Wisconsin Farmer, saying that in the district lying between Lake Michigan and the Rocky mountains all the late apples are winter-killed, and requesting me to send him some grafts of Russian apples, as the climates are similar. After consultation with Mr. Krasnoglazof, the best pomologist of Russia, I forwarded to Wisconsin some grafts, but do not yet know if they reached their destination safely. Mr. Kraznoglazof advised me to send out young trees in the autumn, as that would be much better. I would suggest to you that it might be well for you to import some trees, and give the people of the northwest a fair chance to try if these apples would succeed there. Should you wish any sent, please give directions as to the mode of sending them.

Beets are also very largely cultivated for sugar. Almost all the sugar used in Russia is produced in the country.

There is near Moscow an imperial agricultural academy. I am unable to say whether it is good; but two students there have come to me for information about the agricultural colleges of the United States, saying that they were dissatisfied with the instruction given here.

From the Azores.

The United States consul at the Azores, Charles W. Dabney, esq., writing from Fayal, presents this picture of the primitive condition of agriculture in a country that contains no theoretic farmers, and remains in blissful ignorance of "book farming" and the mechanical contrivances for shirking honest labor:

Imagine, sir, that the plough used by all here is of the same improved shape as was used anterior to the flight of the Israelites from Egypt, and their carts are of a type coeval!

I once imported one of the lightest ploughs used in Massachusetts. I used my personal influence to induce one of the most enlightened farmers to try it. In a very short time he

objected, saying that the use of it would kill his cattle! (Cows are generally used.) I imported a pair of wheels and an axletree, and had a cart made, in other respects similar to those used here, (not to attempt too much at once.) I gave it to a cartman who with others was engaged in carting hogsheads of sugar, who, finding that with greater ease he could convey double the weight, was delighted. At the end of three days he returned the cart, saying that it jolted so that it would destroy his cattle! His fellow-countrymen could not be convinced that if the cart were not driven faster the jolting could not be greater.

EXPORTATION OF WHEAT TO ENGLAND.

A very great increase in wheat exportation over last year has been heretofore noticed. Official statements of imports into Great Britain for five months of 1868, up to May 31, represent a movement of 3,034,093 cwt., against 858,116 cwt. for a similar period of last year—about 1,000,000 bushels per month. The following table shows the total imports in detail. It will be seen that only Russia exceeds our figures:

		1867.	1868.
From Russia	cwt..	4,587,629	3,895,033
From Denmark	do..	293,503	221,165
From Prussia	do..	3,015,614	1,716,566
From Schleswig-Holstein and Lauenburg	do..	70,175	27,879
From Mecklenburg	do..	448,711	317,150
From Hanse Towns	do..	424,546	330,766
From France	do..	321,627	12,424
From Illyria, Croatia, and Dalmatia	do..	213,289	558,308
From Turkey, Wallachia, and Moldavia	do..	1,152,682	1,633,838
From Egypt	do..	26,998	2,013,279
From United States	do..	858,116	3,034,093
From Chili	do..	723,355	249,362
From British North America	do..	87	96,802
From other countries	do..	367,682	674,074
Total	do..	12,504,077	14,780,739

Summary of the crop for 1866, *in the Kingdom of Prussia, according to the census of the present season.*

Provinces.	WHEAT.		RYE.		BARLEY.		OATS.		PEAS.		BUCKWHEAT.		RAPE.	
	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.	Crop of 1866, per acre.	Average crop, per acre.
	Bush.	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*	*Bush.*
1. Prussia, (proper)	20.35	22.32	20.40	21.93	25.53	28.53	25.36	29.80	13.80	16.10	19.92	17.68	20.49	21.19
2. Brandenburg	23.66	23.83	11.06	18.19	25.03	26.76	26.80	28.44	12.40	15.31	10.20	15.36	12.52	19.15
3. Pomerania	24.07	22.56	14.64	19.39	19.22	22.75	27.26	27.12	14.32	15.57	19.08	20.08	14.04	18.96
4. Silesia	19.36	21.81	16.94	21.40	25.15	28.32	31.89	35.35	19.22	16.39	15.79	18.02	19.68	20.85
5. Posen, (Prussian Poland)	20.85	22.17	15.81	18.98	20.44	23.08	19.87	25.08	11.83	15.02	12.79	13.27	19.53	18.40
6. Saxony, (Prussian)	19.27	23.06	16.82	22.39	26.42	29.16	33.84	36.52	17.83	17.37	.....	.....	14.56	22.24
7. Westphalia	19.20	19.77	18.19	21.02	21.86	25.29	32.23	32.66	15.02	16.58	19.56	20.85	17.66	19.58
8. Rhine, (Prussia)	20.30	23.52	22.29	24.40	29.87	34.70	38.06	41.78	18.36	21.19	24.69	28.20	22.72	22.17
9. Hohenzollern	17.97	28.27	15.48	23.44	33.62	34.20	37.77	36.93	23.49	21.40	.....	.....	15.57	22.12
Average	20.56	23.04	16.84	21.24	25.24	28.08	30.33	32.64	16.24	17.20	17.42	19.08	17.42	20.52

METEOROLOGY.

[Compiled in the Department of Agriculture, from the reports made by the observers for the Smithsonian Institution.]

JUNE, 1868.

Table showing the highest and lowest range of the thermometer, (with dates prefixed,) the mean temperature, and amount of rain fall, (in inches and tenths,) for June, 1868, *at the following places, as given by the observers named. Daily observations were made at the hours of* 7 *a. m., and* 2 *and* 9 *p. m.*

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
MAINE.				°		°	°	*In.*
Steuben	Washington	J. D. Parker	27	82	9	47	58.7	2.00
West Waterville	Kennebec	B. F. Wilbur	20	96	12	50	64.6	2.84
Gardiner	....do	R. H. Gardiner	20, 27	81	4	45	63.0	3.20
Standish	Cumberland	John P. Moulton	20	92	3, 4	48	65.4	2.87
Norway	Oxford	Howard D. Smith	20	90	3	49	64.4	.....
Cornish	York	Silas West	20	89	3, 4	49	64.3	3.11
Cornishville	....do	G. W. Guptill	20	89	3, 4	50	65.3	3.58
Averages							63.7	2.47
NEW HAMPSHIRE.								
Concord	Merrimack	John T. Wheeler	20	93	11	49	67.2	.....
Goffstown Centre	Hillsboro'	Alfred Colby	19, 20	93	5	49	66.2	3.50
Averages							66.7	3.50
VERMONT.								
Lunenburg	Essex	H. A. Cutting	18	87	3	36	63.6	4.40
Woodstock	Windsor	Doton & Miller	18	86	2	47	63.1	.....
St. Albans	Franklin	A. H. I. Gilmour	18	90	2	48	65.9	.....
Middlebury	Addison	H. A. Sheldon	17, 20	82	2	47	64.8	3.49
Averages							64.4	3.95
MASSACHUSETTS.								
Kingston	Plymouth	G. S. Newcomb	20	94	3, 4	49	64.7	2.00
Milton	Norfolk	Rev. A. K. Teele	20	93	4	45	66.1	2.62
Cambridge	Middlesex	Rev. J. B. Perry	19	98	4, 11	49	67.5	.....
North Billerica	....do.	Rev. E. Nason	20	88	3	48	67.3	.....
West Newton	....do	John H. Bixby	20	98	4	52	68.2	2.03
New Bedford	Bristol	Samuel Rodman	27	82	28	52	62.9	6.31
Mendon	Worcester	Jno. G. Metcalf, M. D	20	87	11	49	64.2	2.30
Lunenburg	....do	Geo. A. Cunningham	20	91	11	49	66.7	4.05
Amherst	Hampshire	Prof. E. S. Snell	20	89	11	51	66.2	2.44
Richmond	Berkshire	Wm. Bacon	19	92	10	42	68.6	7.94
Williams College	....do	Prof. A. Hopkins	19, 20	88	3	47	69.0	1.82
Averages							66.5	3.50

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
RHODE ISLAND.				°		°	°	*In.*
Newport	Newport	Wm. H. Crandall	13	79	2, 4, 12	50	60.5	3.48
CONNECTICUT.								
Pomfret	Windham	Rev. D. Hunt	8	88	11	46	62.9	3.19
Columbia	Tolland	Wm. H. Yeomans	20	90	5	50	66.9	.....
Middletown	Middlesex	Prof. John Johnston.	20	91	4	50	65.7	4.82
Colebrook	Litchfield	Charlotte Rockwell	19, 20	89	11	48	64.7	.....
Waterbury	New Haven	Rev. R. G. Williams	20	84	11	48	65.1	5.11
Averages							65.1	4.37
NEW YORK.								
Moriches	Suffolk	E. A. Smith & daugh's	20	89	4	55	68.7	2.74
South Hartford	Washington	G. M. Ingalsbe	18	93	7	52	69.9	2.90
Troy	Rensselaer	Jno. W. Heimstreet	19, 20	88	2	52	68.8	3.20
Garrison's	Putnam	Thomas B. Arden	20	92	11	53	67.5	4.43
Throg's Neck	Westchester	Miss E. Morris	20	90	4	53	67.7	.....
Deaf and Dumb Inst.	New York	Prof. O. W. Morris	20	87	5, 11	53	66.6	5.86
Columbia College	do	Prof. Chas. A. Joy	20	90	5, 11	53	67.8	3.59
Flatbush	King's	Eli T. Mack	19, 27	85	4	49	66.3	3.35
Newburgh	Orange	James H. Gardiner	20	92	11, 12	54	69.5	3.22
Minaville	Montgomery	Prof. J. W. Bussing	18	92	2	50	67.6	3.30
Gouverneur	St. Lawrence	C. H. Russell	16	89	3, 9	48	66.7	1.83
North Hammond	do	C. A. Wooster	16	96	7	50	70.2	0.72
Houseville	Lewis	Walter D. Yale	15, 17, 18	86	2	43	65.4	4.53
South Trenton	Oneida	Storrs Barrows	14	92	1	40	65.8	3.82
Cazenovia	Madison	Prof. Wm. Soule	18	87	2	46	64.7	.....
Oneida	do	S. Spooner, M. D.	15, 18	90	2	46	65.0	6.83
Depauville	Jefferson	Henry Haas	14	86	2, 7	46	63.6	2.04
Oswego	Oswego	Wm. S. Malcolm	15, 30	82	7	44	61.2	3.14
Palermo	do	E. B. Bartlett	15	93	2	41	65.7	2.80
Nichols	Tioga	Robert Howell	18	96	2	44	66.2	.....
Newark Valley	do	Rev. Sam'l Johnson	18, 19	90	10	44	64.0	.....
Geneva	Ontario	Rev. Dr. W. D. Wilson	18	87	3, 7	47	67.0	3.12
Rochester	Monroe	H. W. Mathews	19	84	7	48	66.4	2.87
Little Genesee	Allegany	Daniel Edwards	15, 18	92	10	40	64.7	3.95
Suspension Bridge	Niagara	W. M. Jones	15	96	10	42	64.8	2.65
Buffalo	Erie	Wm. Ives	15	91	9	47	67.0	2.51
Averages							66.5	3.34
NEW JERSEY.								
Paterson	Passaic	Wm. Brooks	20	92	11	52	67.6	6.81
Newark	Essex	W. A. Whitehead	20	86	3	50	65.9	5.90
New Brunswick	Middlesex	Geo. H. Cook	20	91	4, 5	53	67.3	6.45
Trenton	Mercer	E. R. Cook	20	89	5	57	72.3	6.23
Moorestown	Burlington	Thos. J. Beans	20	90	4, 5	52	68.9	3.42
Elwood	Atlantic	Joseph S. Fritts	20	94	3	49	68.5	.....
Dover	Morris	Howard Shriver	27	93	3	56	71.3	.....
Rio Grande	Cape May	Jerusha R. Palmer	20	88	4, 11	52	67.1	6.81
Newfield	Gloucester	E. D. Couch	20	96	4	55	71.0	.....
Greenwich	Cumberland	R. C. Sheppard	20	88	3	56	69.8	3.38
Vineland	do	John Ingram, M. D.	20	100	11, 12	56	72.7	3.95
Averages							69.3	5.37

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
PENNSYLVANIA.				°		°	°	*In.*
Nyces	Pike	John Grathwohl	18	93	10	49	67.4	3.55
Fallsington	Bucks	Eben'r Hance	20	89	4	53	68.1	7.00
Philadelphia	Philadelphia	Prof. J. A. Kirkpatrick	20	88	5, 11	55	71.9	3.69
Germantown	do	Thomas Meehan	20	95	11	50	70.7	.....
Horsham	Montgomery	Miss Anna Spencer	20	86	4	53	67.9	7.57
Plymouth Meeting	do	M. H. Corson	20	88	4, 5	54	68.8	.....
Dyberry	Wayne	Theodore Day	19, 20	89	2, 3, 13	44	64.5	.....
Whitehall	Lehigh	Edward Kohler	18, 20	87	3	44	68.0	.....
Factoryville	Wyoming	R. Sisson	20	91	3	45	65.9	2.75
Reading	Berks	J. Heyl Raser	20	92	3	51	71.1	.....
Parkesville	Chester	F. Darlington, M. D	20	92	11	52	67.3	4.68
Ephrata	Lancaster	W. H. Spera	19	94	3	50	72.5	1.90
Harrisburg	Dauphin	John Heisely, M. D.	19, 20	91	3, 4, 5	58	72.9	3.40
Tioga	Tioga	E. T. Bentley	18	101	10	44	68.1	3.17
Lewisburg	Union	Prof. C. S. James	19	91	3, 9	52	68.8	2.71
Ickesburg	Perry	Wm. E. Baker	18	93	2, 3	52	69.2	1.93
Grampian Hills	Clearfield	Elisha Fenton	14, 18	88	3	44	63.9	2.75
Johnstown	Cambria	David Peelor	15	86	10	42	64.6	3.40
Franklin	Venango	Rev. M. A. Tolman	15	92	10	50	68.5	.....
Connellsville	Fayette	John Taylor	29	90	10	47	69.6	.....
New Castle	Lawrence	E. M. McConnell	15	90	10	39	69.4	.....
Beaver	Beaver	Rev. R. T. Taylor	15, 19, 30	87	9	50	69.5	1.50
Canonsburg	Washington	Rev. W. Smith, D. D	15	89	10	43	69.2	0.85
Fountain Dale	Adams	S. C. Walker	19	92	3	55	70.4	3.92
West Chester	Chester	Dr. George Martin	20	92	3	54	71.3	4.15
Averages							68.8	3.47
MARYLAND.								
Woodlawn	Cecil	Jas. O. McCormick	20	91	3, 4, 11	56	70.5	2.37
Annapolis	Anne Arundel	Wm. R. Goodman	20	90	4, 5, 11	59	73.0	3.37
Emmittsburg	Frederick	Eli Smith	18, 19, 20	90	11	56	71.1	.....
Mt. St. Mary's Coll.	do	Prof. C. H. Jourdan	18, 19	86	3, 11	53	68.1	4.65
Averages							70.7	3.46
VIRGINIA.								
Surry C. H.	Surry	B. W. Jones	20	93	1, 11	62	75.3	.....
Johnsontown	North Hampton	C. R. Moore	20	89	3, 4, 10	60	71.7	.....
Comorn	King George	E. Tayloe	20	91	4, 10, 11	60	70.8	3.02
Mt. Solon	Augusta	J. T. Clarke, M. D	19	89	11	57	71.3	2.43
Lynchburg	Bedford	C. I. Merriwether	19	85	11	58	.....	.....
Snowville	Pulaski	J. W. Stalmaker	20, 29	86	12, 13	48	67.0	1.21
Wytheville	Wythe	Rev. Jas. A. Brown.	29	82	12	48	65.8	2.50
Averages							70.3	2.29
WEST VIRGINIA.								
Romney	Hampshire	W. H. McDowell	19	94	.....	.....	.....	.....
Weston	Lewis	Benjamin Owen	15	93	12	55	71.5	.....
Averages							71.5	.....
NORTH CAROLINA.								
Kenansville	Duplin	Prof. N. B. Webster	17, 19, 20	96	11	62	78.3	7.38
Goldsboro'	Wayne	E. W. Adams, A. M.	21	96	11	62	76.5	4.15
Raleigh	Wake	Rev. F. P. Brewer	20	98	11	59	75.9	1.95

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
N. CAROLINA—Con.				°		°	°	*In.*
Oxford	Granville	W. R. Hicks, M. D.	19, 20	88	4, 10, 11	58	73.0	3.90
Albemarle	Stanley	F. J. Kron	30	98	1, 12, 13	54	73.3	2.26
Statesville	Iredell	Thos. A. Alison	29	90	12	50	70.3	1.25
Asheville	Buncombe	E. I. Aston	19	86	27	57	68.9	.....
Averages							73.7	3.48
SOUTH CAROLINA.								
Aiken	Barnwell	John H. Cornish	17, 20	92	1	63	74.1	2.46
Gowdysville	Union	Charles Petty	6	89	4, 10	62	74.7	.....
Averages							74.4	2.46
GEORGIA.								
Atlanta	Fulton	F. Deckner & Son	19	90	23	58	72.6	0.50
Summerville	Richmond	Dr. S. E. Habersham	18, 19	94	10	67	78.4	1.18
Averages							75.5	0.84
ALABAMA.								
Opelika	Lee	J. H. Shields	13	97	22	67	80.4	0.25
Carlowville	Dallas	H. L. Alison, M. D.	2	96	26	70	81.2	2.70
Moulton	Lawrence	Thos. M. Peters, A. M.	19	91	23	54	75.0	0.45
Greene Springs	Hale	H. Tutwiler	29	94	9, 23	60	78.4	0.88
Havana	..do.	S. K. Jennings, M. D.	18, 29, 30	92	23	63	76.7	0.67
Averages							78.3	0.99
FLORIDA.								
Jacksonville	Duval	A. S. Baldwin	18	95	9, 10, 11	70	79.8	12.40
TEXAS.								
Gilmer	Upshur	J. M. Glasco	6	98	9	65	80.4	4.03
Houston	Harris	Miss E. Baxter	13, 14	85	4, 6, 8, 9, 10, 15, 20, 22, 23, 24, 25, 27, 29, 30	74	77.3	.....
Columbia	Brazoria	Hennell Stevens	8, 16	96	10	71	81.0	2.40
Austin	Travis	J. Van Nostrand	18, 19	95	24	72	82.5	0.69
Averages							80.3	2.37
LOUISIANA.								
Benton	Bossiere	J. H. Carter	3, 12, 19	91	22	68	81.4	.....
New Orleans	Orleans	Robt. W. Foster	11, 12, 29	92	22, 25	79	.....	.....
MISSISSIPPI.								
Grenada	Yalabusha	Albert Moore	15, 29	92	22	57	77.6	.....
Brookhaven	Lawrence	T. J. R. Keenan	29	98	23	64	79.4	.....
Natchez	Adams	Wm. McCary	15, 30	88	12	67	78.8	1.57
Averages							78.6	1.57
KENTUCKY.								
Chilesburg	Fayette	Sam'l D. Martin	15	92	10	48	70.0	6.34
Lexington	....do.	S. R. Williams	15	87	10	50	70.7	6.13
Louisville	Jefferson	Mrs. L. Young	15	93	10, 11, 12	50	71.0	5.98
Clinton	Hickman	Rev. T. H. Cleland	16, 18, 19	92	22, 23	59	74.5	1.70
Averages							71.6	5.04

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
TENNESSEE.				°		°	°	In.
Elizabethton	Carter	Charles H. Lewis	14, 16, 29	92	11, 12	52	70.9	.....
Tusculum College	Green	S. S. and Rev. W. S. Doak.	12, 13, 16, 28	95	1, 12	59	73.1	.....
Lookout Mountain	Hamilton	Rev. C.F.P. Bancroft	19	92	21	56	72.3	.....
Austin	Wilson	P. B. Calhoun	16, 17, 18, 29	94	23, 24	56	75.5	1.20
Clarksville	Montgomery	Prof. W.M. Stewart	19	91	22	58	71.9	1.92
Memphis	Shelby	Edw. Goldsmith	19	97	22, 23	64	79.1	1.53
Averages							73.8	1.55
OHIO.								
New Lisbon	Columbiana	J. F. Benner	18	94	9	50	69.8	1.81
Milnersville	Guernsey	Rev. D. Thompson	29	91	12	43	69.6	1.73
Wooster	Wayne	Martin Winger	18, 19	92	9	50	71.9	.....
Gallipolis	Gallia	Alex. P. Rodgers	19	90	10	52	68.2	2.65
Kelley's Island	Erie	Geo. C. Huntington	18	89	7	52	68.2	5.98
Sandusky	....do	Thomas Neill	19	87	10	51	68.5	13.47
Norwalk	Huron	Rev. A. Newton	19	90	7	50	66.9	3.82
North Fairfield	....do	O. Burras	19	87	10, 11	45	73.9	2.68
Westerville	Franklin	Prof. Jno. Haywood.	19	91	9	50	.....	.....
Marion	Marion	H. A. True, M. D	19	89	7, 9	51	67.8	3.14
Hillsboro'	Highland	J. McD. Mathews	15	87	10	49	69.0	4.20
Toledo	Lucas	J. B. Trembly, M. D.	18	91	7	50	68.1	8.19
Bowling Green	Wood	John Clarke	5, 14, 30	93	10	53	70.6	5.76
Kenton	Hardin	C. H. Smith, M. D	30	94	11	45	69.0	7.41
Urbana University	Champaign	M. G. Williams	14, 15, 19	88	9	54	69.6	10.38
Bethel	Clermont	Geo. W. Crane	15	92	9	50	67.8	3.50
Cincinnati	Hamilton	Geo. W. Harper	29	89	10	45	71.2	5.60
Do	....do	R. C. Phillips	14	92	10	58	74.6	7.26
College Hill	....do	John W. Hammitt	15	91	10	50	70.6	7.13
Averages							69.7	5.57
MICHIGAN.								
Monroe City	Monroe	Miss F. Whelpley	14	90	23	40	69.2	7.92
Litchfield	Hillsdale	R. Bullard	30	92	9	48	68.4	5.23
Northport	Leelenaw	Rev. Geo. N. Smith	29, 30	85	6, 8	40	61.4	.....
Holland	Ottawa	L. H. Streng	14	90	9	48	66.4	2.61
Otsego	Allegan	Milton Chase, M.D	14, 30	84	9, 10, 22	42	53.9	.....
Copper Falls	Keweenaw	Dr. S. H. Whittlesey.	17	82	5	32	57.0	2.10
Ontonagon	Ontonagon	Edwin Ellis, M. D	30	84	1	38	59.5	.....
Averages							62.3	4.47
INDIANA.								
Vevay	Switzerland	Chas. G. Boerner	28	97	10, 22	60	76.9	4.95
Muncie	Delaware	G.W.H.Kemper, M.D	30	93	10	47	70.5	4.30
Spiceland	Henry	Wm. Dawson	15, 30	91	21	50	71.0	5.00
Columbia City	Whitley	Dr. F. and Miss L. McCoy.	16	94	21	52	73.6	6.50
Indianapolis	Marion	W. J. Elstun, M. D	15	90	9, 10	54	67.4	2.09
State University	Monroe	Prof. C. M. Dodd	17	90	7, 21, 22	57	71.6	2.91
Rensselaer	Jasper	Dr. J. H. Loughridge	17, 18, 19, 30	94	6, 21	48	70.6	1.75
Merom	Sullivan	Thomas Holmes	30	94	7	54	74.2	3.00
New Harmony	Posey	John Chappellsmith	17	94	7, 21	60	75.2	1.79
Jalapa	Grant	Albert C. Irwin	18	93	10	52	67.4	2.13
Averages							71.8	3.44

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
ILLINOIS.				°		°	°	*In.*
Chicago	Cook	J. G. Langguth, jr	30	90	21	50	66.3	3.11
Near Chicago	do	Samuel Brookes	14	102	21, 22	46	67.3	.....
Ridge Farm	Vermillion	B. C. Williams, M. D.	17, 18	94	6, 7, 11	52	70.8	2.40
Marengo	McHenry	O. P. Rogers	30	92	6	46	.....	9.17
Golconda	Pope	Wm. V. Eldredge	16	104	24	56	78.7	1.30
Aurora	Kane	A. & E. D. Spaulding	18, 30	90	8	47	70.3	3.00
Sandwich	De Kalb	N. E. Ballou, M. D	14, 30	96	8	48	70.4	1.47
Ottawa	La Salle	Mrs. E. H. Merwin	29, 30	99	6, 8	51	70.0	.....
Rochelle	Ogle	Daniel Carey	14, 30	93	8	50	68.5	.....
South Pass	Union	H. C. Freeman	16, 19	97	22	55	75.5	.....
Wyanet	Bureau	E. S. & Miss Phelps	17	93	22	47	70.3	2.41
Tiskilwa	do	Verry Aldrich	17	99	22	48	69.1	.....
Hennepin	Putnam	Smiley Shepherd	17	95	22	44	68.0	.....
Elmira	Stark	O. A. Blanchard	16, 17	94	21	52	71.8	2.10
Peoria	Peoria	Frederick Brendel	18	97	21	55	72.7	1.43
Springfield	Sangamon	G. M. Brinkerhoff	30	94	22	52	70.4	.....
Dubois	Washington	Wm. C. Spencer	18	92	8	42	68.6	3.23
Waterloo	Monroe	H. Künster	17	98	22	56	78.0	.....
Galesburg	Knox	Prof. W. Livingston	18	92	9	56	71.0	1.22
Manchester	Scott	Dr. J. & C. W. Grant	18, 30	93	9	55	73.1	3.22
Mount Sterling	Brown	Rev. A. Duncan	27	97	21	54	75.6	.....
Andalusia	Rock Island	E. H. Bowman, M. D	30	95	22	48	70.4	.....
Augusta	Hancock	S. B. Mead, M. D	18, 30	88	9	57	74.3	2.04
Belvidere	Boone	G. B. Moss	30	90	8, 9	50	67.0	.....
Averages							71.2	2.78
WISCONSIN.								
Manitowoc	Manitowoc	Jacob Lüps	18	85	8	43	62.7	7.20
Plymouth	Sheboygan	G. Moeller	30	93	6	42	65.0	5.90
Milwaukee	Milwaukee	I. A. Lapham, LL.D	18, 29	90	7	39	62.4	5.78
Geneva	Walworth	Wm. H. Whiting	30	95	9	46	67.4	3.62
Waupacca	Waupacca	H. C. Mead	30	95	1, 2, 3	45	68.9	.....
Embarrass	do	E. Everett Breed	30	90	1	47	66.9	3.75
Rocky Run	Columbia	W. W. Curtis	30	90	1	50	67.7	3.56
Edgerton	Rock	Henry J. Shints	30	100	3	49	68.4	11.33
Baraboo	Sauk	M. C. Wait	30	96	3	48	68.7	4.13
New Lisbon	Juneau	J. L. Dungan	30	96	9	48	69.4	.....
Bayfield	La Pointe	Andrew Tate	30	98	8	42	61.2	.....
Averages							66.2	5.66
MINNESOTA.								
St. Paul	Ramsey	Rev. A. B. Paterson	30	94	8	48	67.6	2.68
Minneapolis	Hennepin	Wm. Cheney	28	96	8	47	68.0	4.23
Sibley	Sibley	C. W. & C. E. Woodbury.	17	92	9	43	68.2	4.34
New Ulm	Brown	Charles Roos	30	95	8, 21	52	70.1	2.50
Danville	Blue Earth	T. A. Kellett	30	92	8, 20	48	67.8	.....
Averages							68.3	3.44
IOWA.								
Clinton	Clinton	Dr. J. P. Farnsworth	16, 30	95	22	52	70.9	5.60
Davenport	Scott	D. S. Sheldon	30	90	3	54	70.2	4.85
Dubuque	Dubuque	Asa Horr, M. D	30	95	3, 9, 20, 21	54	69.4	6.03

Table showing the range of the thermometer, &c., for June—Continued.

Stations, &c.	Counties.	Observers.	Date.	Max. temp.	Date.	Min. temp.	Mean temp.	Rain fall.
IOWA—Continued.				°		°	°	*In.*
Monticello	Jones	M. M. Moulton	16, 17	91	22	53	69.6	3.75
Guttenberg	Clayton	Jas. P. Dickerson	30	98	9	44	66.3	.....
Iowa City	Johnson	Prof. Theo. S. Parvin	17, 18	92	22	47	70.8	1.28
Independence	Buchanan	Geo. Warne, M. D	30	95	21	53	70.1	2.90
(Near) Independence	....do	Mrs. D. B. Wheaton	17	100	21	47	74.9	4.10
Waterloo	Black Hawk	T. Steed	30	96	20, 21	50	67.4	.....
Algona	Kossuth	Ph. Dorweiler	16, 30	92	20	48	69.0	.....
Do	....do	James H. Warren	30	90	21	47	67.3	.....
Fort Dodge	Webster	C. N. Jorgensen	30	98	21	51	71.2	4.14
Boonesboro'	Boone	E. Babcock	13, 17	95	20, 21	50	67.0	2.77
Rolfe	Pocahontas	Oscar I. Strong	30	95	20	50	71.4	4.96
Fontanelle	Adair	A. F. Bryant	30	96	8, 20, 21	54	72.8	7.50
Logan	Harrison	Jacob F. Stern	17	90	21	45	68.2	6.90
Woodbine	....do	David R. Witter	30	94	21	53	71.3	.....
Averages							69.9	4.57
MISSOURI.								
St. Louis University	St. Louis	Rev. F. H. Stuntebeck	17	95	21	57	74.5	1.46
Allenton	....do	A. Fendler	17	101	11	50	71.9	1.67
Hematite	Jefferson	John M. Smith	18	96	10	47	73.6	4.80
Canton	Lewis	George P. Ray	30	95	22	44	72.2	2.32
Rolla	Phelps	Homer Ruggles	17	93	22	44	70.3	3.25
Jefferson City	Cole	Nicolas De Wyl	17, 18	94	22	56	74.0	.....
Hermitage	Hickory	Miss Belle Moore	30	99	21	51	75.8	1.47
Harrisonville	Cass	John Christian	16, 17, 18, 30	94	6, 9, 20	58	74.1	3.93
Oregon	Holt	William Kaucher	30	96	9	55	73.9	3.51
Averages							73.4	2.80
KANSAS.								
Leavenworth	Leavenworth	J. Stayman, M. D	18	102	22	42	73.1	4.25
Olathe	Johnson	Wm. Beckwith	28, 29	98	20	55	74.8	5.80
Baxter Springs	Cherokee	Ingraham & Hyland	28	103	21	56	80.3	0.90
Atchison	Atchison	Dr. H. B. & Miss Horn	18	100	23	53	74.7	5.40
Holton	Jackson	Dr. James Watters	18	102	9, 20	56	77.4	.....
State Agricult'l Coll.	Riley	Prof. B. F. Mudge	16	97	21	53	74.3	3.48
Council Grove	Morris	A. Woodworth, M.D.	18	99	22	54	77.7	2.90
Averages							76.0	3.79
NEBRASKA.								
Elkhorn	Washington	John S. Bowen	18	93	9	54	71.2	.....
De Soto	....do	Charles Seltz	30	93	9	51	72.2	4.13
Bellevue	Sarpy	Mrs. E. E. Caldwell	27	94	9	54	74.6	.....
Glendale	Cass	Dr. A. L. & Miss Child	18, 30	92	9	51	72.0	5.00
Omaha Agency	(Reserve)	Rev. Wm. Hamilton	30	92	10	50	72.7	2.25
Averages							72.5	3.79
UTAH TERRITORY.								
Great Salt Lake City	Great Salt Lake	W. W. Phelps	22	90	4	45	66.3	4.00
Wanship	Summit	Thos. Bullock	30	95	24, 25	44	63.1	.....
Averages							64.7	4.00
CALIFORNIA.								
San Francisco	San Francisco	W. O. Ayres, M. D	25	71	18, 19	50	56.1	0.38

NOTES ON THE CROPS, WEATHER, &c., JUNE, 1863.

[Compiled in the Department of Agriculture, from the reports of observers for the Smithsonian Institution.]

Steuben, Me.—First partially clear sunrise on 1st, since May 13; and on 25th, first entirely clear sunrise since May 4. Frost on 4th.

West Waterville, Me.—Apples blossom 2d to 9th. Crops look well, but hoed crops are backward.

Gardiner, Me.—Mean temperature of June $1\frac{1}{3}°$ colder then in 32 years.

Lisbon, Me.—Much fog and mist during the month.

Standish, Me.—Wild red cherry in blossom, 3d; Kent cherry and pear, 4th; lilac, 8th.

Norway, Me.—Month remarkable for much dull weather and absence of winds. Potatoes rotted in the ground up to 5th.

Cornishville, Me.—Hay harvest commenced 29th; crop abundant. Apples scarce and rose bugs making them scarcer.

Goffstown Centre, N. H.—Temperature of June very equable—good for farm work. Crops look well, but fruit is badly blighted.

Woodstock, Vt.—Slight frost on 3d, followed by a tornado, with thunder, which prostrated fences, trees, and even stone walls.

Middlebury, Vt.—Frost on the 10th.

Kingston, Mass.—Apple in full bloom, 6th; about a week later than last year.

Billerica, Mass.—Apples blossom 1st to 3d. Corn planting 8th to 19th.

New Bedford, Mass.—Lilac in full flower, 3d; liburnum, 19th; roses 20th.

Lunenburg, Mass.—So wet that corn-planting was not completed till the 15th; potatoes some days later.

Richmond, Mass.—Slight frost, 10th. Heaviest rain for many years, 16th.

Newport, R. I.—Dense fogs from 5th to 9th; apparently exhalations from the soaked soil.

Columbia, Conn.—June wet and cloudy, retarding farm work, but went out with fair weather.

Waterbury, Conn.—Quinces flowered on 6th; strawberries ripen on 10th, same day last year; Syringa and Antwerp raspberries in flower on 15th.

South Hartford, N. Y.—First part of June cool; since warm, and now crops need rain.

Garrisons, N. Y.—First part of June very wet, and hindered planting, but now grass and grain never looked better.

North Hammond, N. Y.—June closes warm and dry.

South Trenton, N. Y.—White frost on 10th, but no injury.

Palermo, N. Y.—Slight frosts, 2d and 3d. Lilac blossoms 3d; locust trees 16th. Thunder on 4th, 5th, 15th, 16th, 17th, 23d, 24th, 27th, and 30th.

Nichols, N. Y.—Many farmers planted corn from 2d to 6th. Very warm from 13th to 20th, and three or four severer thunder-storms than usual.

Newark Valley, N. Y.—Crops looking well; corn rather backward. Haying begun.

Buffalo, N. Y.—Ontario and Isabella grape blossomed, 25th; 30 days from opening leaf. Strawberries ripe, 22d; 33 days from blossom. Haying began 30th; crop heavy.

Newark, N. J.—Mean temperature of June nearly 2° below the preceding 25; rain fell nearly 2.5 inches greater than in the same 25 Junes.

Elwood, N. J.—First ripe (Metcalf's early) strawberry of 47 varieties, on May 31st. Cut clover for hay, 6th. On 30th, ground dry but vegetation growing finely.

Dover, N. J.—Fruit badly affected by wet and want of sunshine. Bees did not swarm in season, having lost the spring flowers and the "shining hour."

Greenwich, N. J.—Mornings generally cool, and many cool evenings. Strawberries ripe on 6th. Haying on and after 17th.

Vineland, N. J.—Strawberries ripe on 5th. Month well suited for vegetation, though a few days later than last year.

Nyces, Pa.—Thunder storms on 1st, 6th, 18th, 19th, and 24th.

Horsham, Pa.—Early part of June was wet; since then warmer and drier.

Dyberry, Pa.—Slight frosts, 3d and 10th. Thunder-showers, 6th, 15th, 16th, 18th and 20th.

Factoryville, Pa.—Coolest June in four years.

Ickesburg, Pa.—Seventeen-year Cicadas coming up in great numbers about 5th.

Tioga, Pa.—Warmest June in twelve years; the 18th was the warmest June day on record in this county, 101° in shade, 122° in the sun, mean of the day 84°. The whole month was favorable for crops.

Johnstown, Pa.—May apple in full bloom on 2d; locust trees, 11th.

West Chester, Pa.—*Cicada Septendecim* (17-year locust) appearing in great numbers, 3d. Farmers haying, 22d.

Fountain Dale, Pa.—First ripe (wild) strawberries, 7th. Seventeen-year locusts appear, on 7th. Hogs that fed wholly on them, before they came out of the ground, died of constipation produced by their astringency. The excessive humidity of the air caused red (afterwards black) rust on wheat, and a white or yellowish mildew on young catawba grapes; the leaf not mildewed.

Grampian Hills, Pa.—Month mainly favorable; grass and wheat, corn, oats, and potatoes looking well, and fruit a fair crop.

Woodlawn, Md.—The 17-year Cicada appearing, 2d; greatest number, 12th; by close of June, nearly disappeared, leaving many twigs dead on the chestnut, oak and locust.

Emmittsburg, Md.—The 17-year locust began appearing before May 21st, but died, unable to burst their casings on account of wet and cold. The greater portion came up early in June, and females deposited their eggs about the second week, and are now dying, leaving everywhere dead twigs filled with the future brood.

Surry, C. H., Va.—June showery and warm, with several hard rains and much sharp thunder; more than half the month was cloudy.

Wytheville, Va.—Harvest began on 29th; wheat good, oats look well; corn needs rain.

Kenansville, N. C.—Freshets in eastern counties have damaged crops on low grounds.

Oxford, N. C.—Wheat harvest progressing on 18th, a fair crop; corn very promising on 30th.

Albemarle, N. C.—A dry month, crops drying up.

Gowdysville, S. C.—Severe hail, wind and rain on 7th, swept the northwest corner of this county, beating down wheat and corn, ruining cotton, damaging houses, fences, &c.

Atlanta, Ga.—The 13-year locust appeared in May and disappeared the first week in June.

Moulton, Ala.—Month very dry, nights cool, noons hot, and where rains occurred they were partial. Prevailing winds were from northern points.

Greene Spring, Ala.—Month very dry, corn suffering, cotton looking well and remarkably clean, freedmen working well.

Havana, Ala.—Thunder, or lightning, or both, on 3d, 6th, 7th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, and 30th. Heard katy-dids on 22d.

Jacksonville, Fla.—Thunder on ten days; amount of rain double usual, and yet sometimes vegetation suffered from drouth. Crops all promising, and quantities of cucumbers, melons, &c, have been shipped north.

Houston, Texas.—The sun rose and set clear on 3d and from 5th to 18th, and from 24th to 28th, both inclusive.

New Orleans, La.—Hottest day, 28th. The western and northern winds bring heat; northeast and southeast winds are refreshing. Much dry weather in June.

Grenada, Miss.—Month unusually cool, with but little rain; cotton backward, but improving; sweet potatoes dying out with drought.

Brookhaven, Miss.—Dry and hot from 1st to 15th, and after 21st, dry and hot again in some places, putting corn past help; cotton promises well, though in some swamp lands a new worm is destroying it; much rice was planted on new uplands, and is doing well; fruits poor. Heard first katy-did (*Platyphyllum concavum*) on the 14th.

Elizabethton, Tenn.—Harvest commenced 22d; wheat and rye more than average yield.

Clarksville, Tenn.—Since the 3d no rain to wet the ground half an inch deep.

Memphis, Tenn.—New June apples, cherries, plums, and peaches on 7th; squashes, 14th; cucumbers, 20th; crops promise well, but need rain.

Lexington, Ky.—Heavy rains 16th to 20th; violent thunder-storms 25th to 27th; destructive hail-storm on 25th, injuring crops and killing pigs, poultry, &c., in Fayette, Woodford, Scott, and Bourbon counties.

New Lisbon, Ohio.—White frost on 10th; wheat midge at work, 12th. Bees killing the drones. Are we to have no swarms? Crops in prosperous condition, though wheat will be damaged some.

Kelley's Island, Ohio.—Isabella grapes blossom, 25th; Catawbas, 27th.

Norwalk, Ohio.—Slight frost 10th; thunder-storms from northwest on 5th, 15th, 19th, and 30th; tornado on 5th, from northwest, doing considerable damage.

Bowling Green, Ohio.—From 6th to 30th dry; wheat doing well; oats, flax, and barley in good condition; grass abundant; corn injured by worms, but now growing finely; potato bugs prospering, and grasshoppers hatching out.

Kenton, Ohio.—On 6th most violent thunder-storm for years, from southwest, with hail; from 15th to 17th, inclusive, frequent thunder-storms, with fierce lightning, terrific thunder, and sudden and violent changes of wind.

Urbana, Ohio.—From 15th to 18th a succession of terrific thunder-storms; in the first 24 hours $7\frac{1}{3}$ inches of rain fell, but the heavy, continued thunder was yet more remarkable. The 17-year cicada appeared about the 1st, deposited eggs about 15th; by 30th had nearly disappeared.

Bethel, Ohio.—Great rains, with much thunder, 17th and 18th.

Hillsboro', Ohio.—Rains, with thunder, 16th to 20th. A few 17-year locusts, much fewer than in 1851.

Cincinnati, Ohio.—Very heavy thunder-storm on night of 17th and 18th. More than a dozen places in the city were struck, causing two large fires.—HARPER. The amount, brilliancy, and constant play of electricity exceeded any I ever witnessed.—PHILLIPS.

College Hill, Ohio.—Thunder-storm on night of 17th and 18th, attended with hail and incessant lightning; rain-fall in 24 hours, 5.75 inches.

Toledo, Ohio.—Rain on 14 days; severe showers on 5th, 6th, 19th, 29th, and 30th, the last two days with vivid white lightning, incessant thunder, and great rainfall. Saw the 17-year locust first on 19th—their ninth recorded appearance; the first was in 1715, the last 1851.

Monroe City, Mich.—Terrific thunder and lightning on 5th, 18th, and 19th; deluges of rain 29th and 30th.

Litchfield, Mich.—Severe thunder-storm and gale on 16th, prostrating trees, unroofing buildings, &c. All crops promising; wheat filling finely.

Northport, Mich.—Latest frost on 9th; June favorable to crops. Some

grain and grass were injured by drought in May, but generally grain and fruit promise well.

Otsego, Mich.—Harvest about a week later than usual. Heavy thunder 3d, 5th, and 15th; great rain-falls 5th and 6th; violent wind 16th and 19th.

Copper Falls, Mich.—May and June unusually warm, and, until 29th June, very dry. Storms 29th and 30th, with much lightning and thunder.

Veray, Ind.—Thunder-storms on 2d, 16th, 17th, 18th, 19th, 24th, and 25th—some very severe. Locusts (17-year) appeared in small numbers. Harvest commenced; crop above expectation.

Muncie, Ind.—Light frosts 9th and 10th; on 17th sheet lightning in northeast, with continuous rolling thunder—one prolonged peal for over 20 minutes. The red-eyed or 17-year locusts appeared in great numbers about the 1st; have now nearly disappeared.

Rensselaer, Ind.—June dry and moderately warm. Crops never looked better.

Jalapa, Ind.—On 15th grand electric display in south and southeast; lightning diffuse, but out from the pale light balls of fire shot across the heavens, generally bursting into numerous spicula, resembling serpents.

Ridge Farm, Ill.—Rye harvest 26th; cherries ripe, and potatoes and spring wheat in bloom.

Hennepin, Ill.—First week misty, then fair and warm to 17th; 19th and 20th, rain; then to close, favorable crops; a full harvest. Fruits poor, except grapes, which promise full crops.

Mt. Sterling, Ill.—First part of June wet; latter part dry. Wheat seldom better; corn backward, but thrifty.

Belvidere, Ill.—Month very favorable for wheat and corn, but not for grass.

Marengo, Ill.—Very severe thunder-storm on 15th; lightning killed several persons in this county. The thunder was a continuous roar, and the rain-fall six inches in four hours.

Manitowoc, Wis.—Hoar frost 7th; thunder-storms 4th, 5th, 13th, 14th, 16th, 17th, and 30th; fog 4th, 13th, 14th, 15th, 27th, 28th, 30th; hail 14th.

Plymouth, Wis.—Just rain enough at proper times to make everything grow finely.

Milwaukee, Wis.—Heavy rains 15th and 16th; on 15th overflowed the gauge; on 16th over an inch fell in 30 minutes.

Bloomfield, Wis.—A new potato bug—slender, three-fourths of an inch long, slate color, winged, flies fast and quick—covers the vines and consumes the leaves rapidly; in some gardens ate the young bean plants.

Rocky Run, Wis.—The dry May and drought late in June has affected the straw crops.

Baraboo, Wis.—Growth of crops equal to 1860; never looked better; hops ahead of last season, and more than double the area planted; fear there will not be pickers enough to secure them.

St. Paul, Minn.—Except the heat of the last five days, June pleasant; rains moderate and in season to supply the crops, which surpass all ever seen here, and are in advance of sections 2 and 3°, further south, by from 10 to 14 days.

Minneapolis, Minn.—Slight frosts 8th and 20th; strawberries ripe 7th. A pleasant month and splendid crops.

Sibley, Minn.—Slight frosts on mornings of 9th and 21st.

Clinton, Iowa.—The first week wet; the rest of June dry and warm. Crops never looked better, and fruit is abundant.

Monticello, Iowa.—Vegetation a week earlier than last year, and hops two weeks; all looking well.

Guttenberg, Iowa.—Grass the same as last year. Spring wheat and oats 10 per cent., and corn 20 per cent. better.

Near Independence, Iowa.—Heavy dews nearly every night in June; otherwise a dry month. Streams low, and many wells dry.

Independence, Iowa.—Wigelia, (yellow) rose, and snowball in bloom 1st; raspberries ripe and strawberries nearly over, 30th.

Algona, Iowa.—Fairest prospect of heavy crops ever known here; no grasshoppers; potato bugs doing but little damage. On 30th, grasshoppers seen flying from S. E. to N. W.; a few alighted, and "fell to" on blades and heads of small grain. On their wings were bright red insects, (lice,) about the size of a pin's head. This section will probably be their "Egypt" next year.

Fort Dodge, Iowa.—Grasshoppers' eggs laid last fall began to hatch in April, when first broods were frozen, and continued until in June. When full grown they shed their coats, and came out with wings full size. On 17th they commenced migrating, flying with the wind; the air is now full of them, going north and northwest. They have done much damage in this county; wheat will hardly yield seed; oats a little more; garden vegetables entirely destroyed; corn but little damaged, and may be spared, as over three-fourths have left us, and the rest are going as fast as they get their wings uncased.

Boonsboro', Iowa.—[An account of grasshoppers and damages like the above.] Herd's-grass is entirely stripped; pea vines escape, but currants and gooseberries are leafless. If grain can mature on a leafless stalk, about half a crop may be reaped.

Rolfe, Iowa.—Grasshoppers commenced flying away 22d, and myriads are now going north with the wind.

Fontanelle, Iowa.—Wheat partly eaten up and corn injured by grasshoppers, now in myriads high in air, flying northward.

Logan, Iowa.—[Same sad story of the ravagers.] Some farmers plowed under their ruined wheat the last week in June, and planted corn, hoping for something of a crop.

Woodbine, Iowa.—A favorable month; potatoes and corn look well, considering the grasshoppers, now nearly gone. Of wheat, farmers, on an average, will get their seed.

Allentown, Mo.—Great numbers of the 17-year locusts appeared after May 22, and after depositing their eggs, (and thus destroying tender twigs of trees and shrubs, especially pear and apple,) disappeared by the 28th June.

Hematite, Mo.—There are two distinct kinds or varieties of 17-year locusts—one species about twice the size of the other, (male and female,) and differing greatly, also, in their cries and actions.

Jefferson City, Mo.—Wheat harvested July 9; a middling crop, suffered from rust; hay light; corn needs rain; apples few; peach crop medium; grapes promising, and no rot yet.

Hermitage, Mo.—Month remarkable for small amount of rain, and extreme drought in latter part, and great change from high temperature on 18th to low on 21st, without apparent cause.

Oregon, Mo.—Harvest commenced 29th; grasshoppers gone north, 30th; damage to crops slight this year.

Holton, Kan.—Crops never promised greater yield per acre, and of potatoes, oats, wheat, corn, a double area was planted. Fruits the same; grapes splendid, and hops flourishing.

Council Grove, Kan.—First attacks of potato bug on 13th; subdued mostly by gathering and burning.

Baxter Springs, Kan.—Very dry on Cherokee neutral and Osage Indian lands, also in southwestern Missouri. Wheat good in quality, but thin on ground; probably 15 bushels per acre. Corn, vegetables, and grass almost a failure; oats medium.

Elkhorn, Neb.—Wild raspberries ripe, 1st; strawberries, 13th; red Dutch currants, 27th. Season thus far sufficiently moist. Small grains, where not

injured by grasshoppers, promising, and some ready for harvest. Corn looks well; grass is abundant; potatoes growing finely, and but few bugs seen.

De Soto, Neb.—Grasshoppers left about the 15th; air full of them. Crops look fine.

Glendale, Neb.—A remarkably favorable month. The grasshoppers, now nearly all gone, nearly devastated some farms, while others, alongside, are unharmed. The wheat crop of this (Cass) county is damaged about 20 per cent.; but as nearly double the area was sown there will still be a large crop, unless the "hoppers" drop down on us in their flight from some other quarter.

Great Salt Lake City, Utah.—But one hail-storm in June. Agricultural prospects good.

Wanship, Utah.—Frosts and freezing 1st, 2d, 6th; snows, 1st, 4th, and 25th. Garden fences covered and air filled with locusts (commonly, "hoppers") 27th to 30th; have destroyed all the grain, much of the grass, and some *thrice*-planted gardens.

Harrisburg, Utah.—Light frost 1st, 5th, and 15th; high winds, damaging fruit and trees, 1st, 3d, 5th, 14th. After 15th much hot and dry weather, with cool nights. Began to cut wheat, which will average 30 bushels to the acre; think winter wheat and rye would do well here. The country is fast filling up, means for irrigating the land increasing, and fruit culture on the increase, especially the grape. Fruit is fine and abundant.